

# List of All Chemicals

## P Metrosideros sclerocarpa (Myrtaceae)

\*Unless otherwise noted all references are to Duke, James A. 1992. Handbook of phytochemical constituents of GRAS herbs and other economic plants. Boca Raton, FL. CRC Press.

| Chemical                      | Part   | All | Low PPM | High PPM | StdDev | *Reference |
|-------------------------------|--|-----|---------|----------|--------|------------|
| (E)(E)-FARNESOL               | Leaf   |     | 87.0    | 348.0    | 1.0    | *          |
| ALLO-AROMADENDRENE            | Leaf   |     | 7256.0  | 29024.0  | 6.51   | *          |
| ALPHA-COPAENE                 | Leaf   |     | 7.0     | 28.0     | -0.19  | *          |
| ALPHA-CUBEBENE                | Leaf   |     | 28.0    | 112.0    | 0.37   | *          |
| ALPHA-GURJUNENE               | Leaf   |     | 23.0    | 92.0     | 0.13   | *          |
| ALPHA-SELINENE                | Leaf   |     | 62.0    | 248.0    | 4.18   | *          |
| <b>Activities (3)</b>         |  |     |         |          |        |            |
| Antimalarial IC50=>50 ug/ml   | Rukunga, G. and Simons, A. J. 2006. The Potential of Plants as a Source of Antimalarial Agents - A Review. Africa Herbal Antimalaria Meeting. PlantaPhile Publications, Berlin. 72 pp. |     |         |          |        |            |
| Antiplasmodial IC50=>50 ug/ml | Rukunga, G. and Simons, A. J. 2006. The Potential of Plants as a Source of Antimalarial Agents - A Review. Africa Herbal Antimalaria Meeting. PlantaPhile Publications, Berlin. 72 pp. |     |         |          |        |            |
| Perfumery                     | Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry  |     |         |          |        |            |
| AROMADENDRENE                 | Leaf   |     | 73.0    | 292.0    | -0.44  | *          |
| <b>Activities (3)</b>         |  |     |         |          |        |            |
| Antiseptic                    | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.                                 |     |         |          |        |            |
| Cancer-Preventive             | Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.  |     |         |          |        |            |
| Pesticide                     |  |     |         |          |        |            |
| BETA-ELEMENE                  | Leaf   |     | 47.0    | 188.0    | 0.57   | *          |
| <b>Activities (5)</b>         |  |     |         |          |        |            |
| Anticancer (Cervix)           | Medicinal and Poisonous Plants of the Tropics. Leeuwenberg, A.J.M., ed. Pudoc, Wageningen. 1987.   |     |         |          |        |            |
| Antigliomic                   |  |     |         |          |        |            |
| Antiproliferant               |  |     |         |          |        |            |
| Antitumor (Cervix)            | Medicinal and Poisonous Plants of the Tropics. Leeuwenberg, A.J.M., ed. Pudoc, Wageningen. 1987.   |     |         |          |        |            |
| Apoptotic                     |  |     |         |          |        |            |
| BETA-SELINENE                 | Leaf   |     | 98.0    | 392.0    | 3.4    | *          |
| <b>Activities (3)</b>         |  |     |         |          |        |            |
| Antimalarial IC50=>50 ug/ml   | Rukunga, G. and Simons, A. J. 2006. The Potential of Plants as a Source of Antimalarial Agents - A Review. Africa Herbal Antimalaria Meeting. PlantaPhile Publications, Berlin. 72 pp. |     |         |          |        |            |
| Antiplasmodial IC50=>50 ug/ml | Rukunga, G. and Simons, A. J. 2006. The Potential of Plants as a Source of Antimalarial Agents - A Review. Africa Herbal Antimalaria Meeting. PlantaPhile Publications, Berlin. 72 pp. |     |         |          |        |            |
| Perfumery                     | Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry  |     |         |          |        |            |
| BICYCLOGERMACRENE             | Leaf   |     | 40.0    | 160.0    | -0.25  | *          |
| CADINA-1,4-DIENE              | Leaf   |     | 28.0    | 112.0    | 3.59   | *          |
| CALACORENE                    | Leaf   |     | 7.0     | 28.0     | 0.65   | *          |
| CALEMENE                      | Leaf   |     | 19.0    | 76.0     |        | *          |
| CARYOPHYLLENE                 | Leaf   |     | 191.0   | 764.0    |        | *          |
| DELTA-CADINENE                | Leaf   |     | 223.0   | 892.0    | 3.42   | *          |

**Activities (9)**

Aldose-Reductase-Inhibitor

Antiacne

Antibacterial MIC800 ug/ml

Muroi, H. and Kubo, I. 1993. Combination Effects of Antibacterial Compounds in Green Tea Flavor against Streptococcus mutans. *J. Agric. Food Chem.* 41: 1102-1105.

Anticariogenic MIC800 ug/ml

Muroi, H. and Kubo, I. 1993. Combination Effects of Antibacterial Compounds in Green Tea Flavor against Streptococcus mutans. *J. Agric. Food Chem.* 41: 1102-1105.

Antistreptococcic

Cytochrome-P450-Inducer

P450-Inducer

Pesticide

Testosterone-Inducer

|                |      |      |       |       |   |
|----------------|------|------|-------|-------|---|
| GAMMA-CADINENE | Leaf | 53.0 | 212.0 | 1.89  | * |
| GERMACRENE-D   | Leaf | 34.0 | 136.0 | -0.41 | * |

**Activities (2)**

Pesticide

Pheromone

|          |      |       |       |       |   |
|----------|------|-------|-------|-------|---|
| GLOBULOL | Leaf | 64.0  | 256.0 | -0.28 | * |
| HUMULENE | Leaf | 177.0 | 708.0 | 2.62  | * |

**Activities (2)**

Antimalarial IC50=86 ug/ml

Antiplasmodial IC50=86 ug/ml

|                |      |     |     |       |   |
|----------------|------|-----|-----|-------|---|
| METHYL-EUGENOL | Leaf | 2.0 | 8.0 | -0.81 | * |
|----------------|------|-----|-----|-------|---|

**Activities (20)**

Anesthetic

Antibacterial Internat. J. Oriental Med. 15(4): 199, 1990+

Anticonvulsant

Antidote (Strychnine)

Antifeedant Jacobson, M., *Glossary of Plant-Derived Insect Deterrents*, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.

Antioxidant EC50=100 µl/l

Antiradicular EC50=100 µl/l

Antiseptic

Cancer-Preventive Stitt, P. A. *Why George Should Eat Broccoli*. Dougherty Co, Milwaukee, WI, 1990, 399 pp.Carcinogenic Williamson, E. M. and Evans, F. J., *Potter's New Cyclopaedia of Botanical Drugs and Preparations*, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.

FLavor FEMA 5-15 Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry

Fungicide

Fungistat 100 ug/ml Laekeman, G.M., Van Hoof, L., Haemers, A., Vanden Berghe, D.A., Herman, A.G., and Vlietinck, A.J. Eugenol a Valuable Compound for In Vitro Experimental Research and Worthwhile for Further In Vivo Investigation. *Phytotherapy Research* 4(3): 93, 1990.Insectifuge Jacobson, M., *Glossary of Plant-Derived Insect Deterrents*, CRC Press, Inc., Boca Raton, FL, 213 p, 1990.

Myorelaxant Fitoterapia No.61: 254, 1990.

Narcotic

Nematicide MIC=1 mg/ml Shoyakugaku Zasshi, 44: 183.

Perfumery Aloe Research Council - Duke writeup of non-peer reviewd book by Coats and draft by Henry

Pesticide

Sedative

|               |      |       |       |       |   |
|---------------|------|-------|-------|-------|---|
| PALUSTROL     | Leaf | 22.0  | 88.0  | 1.38  | * |
| SPATHULENOL   | Leaf | 35.0  | 140.0 | -0.03 | * |
| VIRIDIFLORENE | Leaf | 150.0 | 600.0 | 2.92  | * |
| VIRIDIFLOROL  | Leaf | 56.0  | 224.0 | 0.32  | * |

## Activities (1)

Antiacetylcholinesterase IC<sub>50</sub>=25 ug/ml